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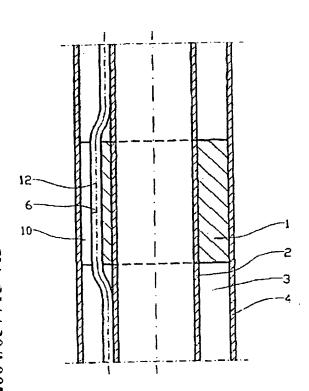
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(54) Title: A CABLE DUCT DEVICE IN A SWELLING PACKER



(57) Abstract: A cable duct device in a swellable packer (1) of the kind in which the packer (1) is adapted to be able of sealing an annulus (3), and in which the swellable packer (1) is provided with at least one opening (6) therethrough adapted to constitute a duct for a cable (12).

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 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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International application No. PCT/NO 2003/000410

A. CLASSIFICATION OF SUBJECT MATTER									
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B. FIELDS SEARCHED									
Minimum documentation searched (classification system followed by classification symbols)									
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched									
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)									
WPI DATA, EPO-INTERNAL									
C. DOCUMENTS CONSIDERED TO BE RELEVANT									
Category*	Citation of document, with indication, where app	Relevant to claim No.							
Х	US 6173788 B1 (JEFFREY J. LEMBEC 16 January 2001 (16.01.2001)	1-5							
Х	US 3899631 A1 (BILLY E. CLARK), (12.08.1975), see wole docum	1-5							
A	US 6135210 A1 (OLEGARIO S. RIVAS (24.10.2000), column 4, line line 20	1-5							
A	US 2242166 A1 (E. O. BENNETT), 1 (13.05.1941), figures 3-4	1-5							
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US	6173788	B1	16/01/2001	GB GB NO NO	2336170 A,B 9907757 D 315437 B 991638 A	13/10/1999 00/00/0000 01/09/2003 08/10/1999
US	3899631	A1	12/08/1975	NONE		
US	6135210	A1	24/10/2000	CA GB GB	2277566 A 2339816 A,B 9915984 D	16/01/2000 09/02/2000 00/00/0000
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